A Natural Lawn & Garden Guide

natural Lawn care

For Western Washington

2010

Hey, Neighbor!

Maybe you're asking, what's a salmon doing on the lawn? I'm here to say that your lawn and my stream are connected. If you use too much water or too many chemicals, it may hurt me and my fish friends. So try a "natural" approach to lawn care. You can have a healthy, good-looking lawn—and be a good neighbor, too!

Going natural:

healthy lawns that are easy on the environment

Going natural may mean you need to accept a lighter green color, a few weeds, and mow a little higher than you're used to. But you'll have a healthy, good-looking lawn that's easier on the environment. And that's a good deal for fish and everybody.

Why make a change?

Your lawn can be a great place to hang out, but depending on how you care for it, your lawn can also be part of big environmental problems.

Lawn and garden watering make up more than 40% of our summer water use. That's when supplies are lowest and when salmon, wildlife, and people need it most. It's also when rates are highest.

Much of this water is wasted through overwatering—a practice which invites lawn disease. So water wisely—and help out your lawn, your wallet, and the fish.

Scientists testing our urban streams found 23 pesticides used by homeowners. Rainwater can wash bug and weed killers from our lawns into streams or lakes. Scientists are worried about the effects of these chemicals on birds and fish. Rain can also wash fertilizers from lawns into local waters. The fertilizers feed algae that choke out fish and other water dwellers.

Pesticides may not be so great for you and your kids either. In a science journal review of 98 health studies related to the use of weed and bug killers, half the studies found an increased cancer risk. And safe disposal of pesticides costs you, the ratepayer, big bucks.

Grass clippings are overloading our compost facilities, when they could supply at least 1/4 of your lawn's fertilizer needs. It's called "grasscycling"—just leave the clippings on the lawn. This saves you time and money and helps prevent the growing problem of overloaded compost facilities. And if you use less fertilizer, there's less chance of it washing off into our streams.

Natural lawn care works! Fortunately, the natural lawn care practices outlined in this booklet make it easy to reduce the use of hazardous products while saving time, water, money and helping to preserve our Northwest environment.

Six Steps to Natural Lawn Care

Healthy lawns grow on healthy soil. Using proper soil preparation and lawn maintenance practices will help to build healthy soil and vigorous, deep-rooted lawns. These lawns are more resistant to disease, tolerate some insect and drought damage, and will out-compete many weeds. The practices recommended here can help make lawns healthier for our families, protect beneficial soil organisms, and protect our environment too.

Mulching mowers

For clean mowing that leaves no visible clippings, consider buying a "mulching" mower. This mower will chop clippings finely and blow them down into the lawn so they disappear and won't be tracked into your house. Check the spring issues of *Consumer Reports* for current ratings of mulching mowers. The rechargeable electric mulching mowers are quiet, clean, and grass-cycle very well.

1 Mow high, mow often, and leave the clippings.

Set mowing heights up to about 2 inches for most lawns (1 inch on bentgrass lawns) to develop deeper roots and crowd out weeds.

Remove only one-third of the grass length at each mowing. Try to mow weekly in spring. Cutting too much at once stresses the grass.

Leave the clippings on the lawn. "Grasscycling" provides free fertilizer (at least 1/4 of your lawn's needs), helps lawns grow greener and denser, and doesn't cause thatch buildup.

You can grasscycle with your existing mower. For best results, keep the blade sharp, mow when the grass is dry, and mow a little more often in the spring. Clippings left scattered on the surface will break down quickly. If there are clumps, mow again to break them up. Push mowers work great for grasscycling.

Fertilizer: How much is enough?

WSU Extension recommends that home lawns receive 3 to 4 pounds of nitrogen (in a balanced fertilizer) per 1,000 square feet of lawn each year. Grasscycling can supply at least one-quarter of that. Split the rest between May and September applications. Avoid fertilizing in the early spring because it makes lawns grow too fast (unless your lawn needs help recovering from disease or insect damage). Wait until May.

2 Fertilize moderately in May and September with a "natural organic" or "slow-release" fertilizer.

These fertilizers release nutrients to feed the lawn slowly and less is wasted through leaching or runoff into our streams. "Quick-release" fertilizers are 100 percent water soluble and wash into streams easily. Instead, look for the words "natural organic" or "slow-release" on the bag.

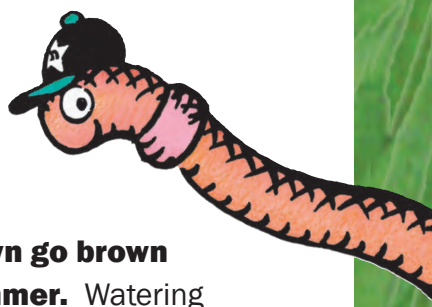
Healthy lawns are a medium green color depending on the variety of grass. The darkest green turf, which many people strive for, is not in fact the healthiest turf. Overfertilized lawns are more prone to disease, thatch buildup, and drought damage.

With slow-release or organic fertilizers, you can fertilize just twice a year in mid- to late May and again in early September. If you choose to fertilize only once, the fall application is most important.

Soils west of the Cascades are often low in calcium. Apply lime in the spring or fall if a soil test shows a calcium deficiency or acid soil conditions (pH less than 5). Contact WSU Snohomish County Extension for information on soil testing and to request Fact Sheet #6, "Soil Improvement." Download the WSU Extension Home Lawns bulletin, EB-0482 (see the Resources section).

Remember, grasscycling returns valuable nutrients to the soil every time you mow!

3 Water deeply, to moisten the root zone, but infrequently.



Grasses do better when the whole root zone is wetted and then partially dries out between waterings. Avoid frequent shallow watering that causes shallow rooting. Overwatering can promote lawn disease, leach nutrients from the soil, and waste water.

Aerate the lawn if water won't penetrate because of soil compaction or thatch buildup. Dethatching will also help if there is heavy thatch buildup.

Water about one inch per week during July and August. Use less in late spring or early fall—let the weather be your guide. Water slowly, or start and stop, so the water penetrates rather than puddling or running off. Sandy soils will need lighter, more frequent watering because they can't hold much water. Water early or late, not in the heat of the day.

Newly planted lawns may need daily watering if planted in the late spring or summer. Replant in September to avoid that chore, but be ready to water if it stops raining.

Consider letting the lawn go brown and dormant in the summer. Watering deeply but slowly, so it penetrates, once each rainless month will help support dormant lawns so they recover better in the fall. (Perennial ryegrass lawns on sandy soil will not survive if allowed to dry out completely.) Avoid heavy traffic on dormant lawns, or regularly water the play/high use areas to prevent damage. When rain returns in the fall, overseed any thin areas to thicken the lawn and help crowd out weeds.

Weather-wise watering

Watch the weather (don't water if it's going to rain). Signs of a lawn that needs more water include a duller color, and the "footprint test": grass blades stay bent in your footprint rather than popping back up. Or call your water utility for information on how to use evapotranspiration (ET) rates to match your irrigation to current weather conditions.

Poor soil? What to do:

If your soil is very poor and compacted, it may be best to improve the soil and replant.

- **Remove the sod with a rented sod stripper.**
- **Get a soil test to find out what's missing and spread the amendments (like lime) suggested in the test results.**
- **Spread 2 inches of Grade A compost and till it in to a depth of 6-8 inches. Sandy or gravelly soils may need other amendments, too—consult a certified landscaper or WSU Extension for help with these soils.**
- **Rake the soil level, roll with a landscape roller, water to settle for a day, and rake again.**
- **Seed with an appropriate grass mix, and water daily if the weather is hot and dry until the lawn is well established.**
- **Call WSU Extension for more information on seeding, or consider hiring a qualified professional for this big job.**
- **Download the WSU Extension Home Lawns bulletin (see the Resources section).**

Refer to the Resources section for WSU Extension contact information.

4 Improve poor lawns with aeration, overseeding, and top dressing with compost. Or fix the soil and replant.

Aerate compacted soil in the spring or fall to improve root development. Use a rented power aerator for best results, or hire a professional. The soil should be moist, and making two or more passes gives better results. Rake or mow to break up the cores. The soil left will help to decompose excess thatch layers in the lawn. If your soil is deeply compacted (more than 2 inches—dig a hole to find out), find a landscape professional who has equipment that penetrates 6 to 8 inches to aerate for you.

Overseed, after raking or aerating to expose soil, with a perennial rye/fine fescue mix designed for Pacific Northwest conditions. Talk to a knowledgeable nursery-person or call WSU Extension for seed recommendations. A light application of "starter" fertilizer can help the seeds grow quickly and crowd out weeds.
A 1/2-inch thatch layer can be beneficial, but much more than that can keep water, air, and fertilizer from reaching the roots. Rent a power dethatcher and make several passes, then overseed to thicken the lawn and crowd out weeds.

Then top dress with compost. Spread a 1/4-inch layer of compost by scattering it with a shovel, then rake it in to fill aeration holes, cover the seed, and improve the soil.

April/May or September are the best times to aerate, overseed, and top dress, or to amend the soil and replant.

5 Think twice before using "weed and feed" or other pesticides.

These products may damage soil, lawn health, existing trees and shrubs, and may pollute our waterways. Some studies also suggest that use of pesticides may harm our health.

Crowd out weeds and reduce pest damage by promoting a healthy, vigorous lawn through proper fertilization, irrigation, and mowing. Improve thin areas with aeration and overseeding. A healthy turf will need far fewer pesticides.

Accept a few "weeds" in your lawn. Some, like clover, may look fine. Target the problem weeds, leave the others.

Remove problem weeds by hand in the spring and fall. Don't cover your entire lawn with weed and feed just to kill a few dandelions. Pincer-type long handled weed pullers are available at many garden stores. They work well in moist soil, with no stooping. Pull dandelions when they're young (for best results get as much root as possible).

Or spot-spray problem weeds with the proper herbicide at the right time of year. Identify the weed to make sure you are using the correct product.

Read the label carefully before using any pesticide (including weed and feed). Be sure to follow all label warnings, wear proper protective clothing, and keep children and pets off the lawn for at least the time specified on the label (see the Resources section for more safety, label, and disposal information).

What about crane flies?

For the average lawn, crane flies are rarely a problem. Contact WSU Extension at (425) 357-6010 to properly diagnose your lawn problem. A healthy lawn can tolerate some European crane fly larvae. The larvae feed on grass roots and crowns in fall, warm winters, and early spring. Birds feed on the larvae in winter, bringing populations down below damaging levels.

If your lawn problem is diagnosed as European crane fly damage, count larval populations in early spring before choosing any control methods. You cannot control crane flies by applying pesticides in the late spring or summer. The insecticides often used for control are toxic to birds and aquatic life. For information on crane fly control, visit http://whatcom.wsu.edu/cranefly.

6 Consider alternatives to lawns for steep slopes, shady areas, or near streams and lakes.

Leave a buffer of natural vegetation along streams and lakes to filter pollutants and protect human health, fish and wildlife. These buffers should include shrubs and trees to shade the stream, and groundcovers of native plants or low-maintenance grasses that are left unmowed and wild. Avoid use of pesticides or soluble fertilizers near streams, ditches, wetlands, or shorelines.

Grass grows best on well-drained soil in full sun or partial shade. Steep slopes are hard to mow and water. For lawn alternatives or grasses that do well in shady, steep, or wet sites, contact WSU Snohomish County Extension to request Fact Sheet #77, "Ground Covers and Lawn Substitutes" (see the Resources section below).

Resources

- **Least-toxic ways to manage lawn pests: visit http://pep.wsu.edu/hortsense/**
- **Grasscycling, composting, water conservation and natural lawn care: visit www.naturalyard.surfacewater.info or http://gardening.wsu.edu**
- **Safe disposal of leftover pesticides: Snohomish County Public Works Solid Waste, (425) 388-3425**
- **Pesticide labels, safety and environmental effects: National Pesticide Information Center, (800) 858-7378, or visit www.npic.orst.edu**
- **Natural Lawn & Garden Guides: available from agencies on back cover**
- **WSU Snohomish County Extension, Master Gardeners: (425) 357-6010, or e-mail MG.help@wsu.edu, or visit www.snohomish.wsu.edu**
  - **Diagnose Lawn Problems**
  - **Fact Sheet #6, "Soil Improvement"**
  - **Fact Sheet #77, "Ground Covers and Lawn Substitutes"**
- **WSU Extension publications: visit https://pubs.wsu.edu**
  - **Home Lawns bulletin, EB0482**
  - **Lawn Renovation, EB0924**
  - **Thatch and Its Control, EB1117**

When it comes to your lawn, act naturally.

A message from local cities, counties and water utilities promoting a healthy environment

This guide was developed and produced by **Seattle Public Utilities, King County Water and Land Resources Division, and the Local Hazardous Waste Management Program in King County,** based on information from scientific and professional literature, and discussions with scientists and turf professionals around the Northwest. Some edits were provided by the Snohomish County Public Works Surface Water Management Division and WSU Snohomish County Extension.

There is a wide range of scientific evidence, and some disagreement, about the possible effects of turf chemicals on the soil, people, pets, and the environment. The recommendations here represent the sponsoring agencies' best advice, based on the available information. We encourage you to learn more. Please contact your local landscape professional, WSU Extension, or see the Resources section.

To request a Natural Lawn & Garden Guide, contact:

- Snohomish Conservation District, (425) 335-5634, ext. 4, www.snohomishcd.org
- Snohomish County Public Works, Surface Water Management, (425) 388-3464, www.naturalyard.surfacewater.info
- WSU Snohomish County Extension Master Gardeners, (425) 357-6010, www.snohomish.wsu.edu
- Visit www.naturalyardcare.info

The Natural Lawn & Garden Series:

- Growing Healthy Soil
- Smart Watering
- The Plant List
- Choosing the Right Plants
- Composting at Home
- Natural Lawn Care
- Natural Yard Care (summary)
- Natural Pest, Weed & Disease Control

SNOHOMISH CONSERVATION DISTRICT

WASHINGTON STATE UNIVERSITY SNOHOMISH COUNTY EXTENSION

Puget Sound Starts Here

Snohomish County Public Works Surface Water Management

Working together for people, streams & fish

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